

cimens, in the dorsal fin 110–112 rays, in the anal fin 78–80, in the caudal fin 16–18. The entire body of the fish is rather closely strewn with small protuberances, which, on the head, stand without perceptible order, but on the greater part of the body, on the interspinous part of the dorsal and anal fins and on the base of the caudal fin are arranged in longitudinal rows. These protuberances are almost round, about 0·1 millim. in diameter, almost flat at the top, and armed with a few very small and short spines; only along the extreme edge of the interspinous part of the dorsal and anal fins and on the base of the caudal fin these protuberances are more projecting, almost semiglobular, equipped with more numerous and longer spines. The mouth is small, delicately formed, both jaws well armed with pointed, needle-shaped teeth. The eyes are round, very projecting, with a broad white ring of sclerotica visible around the iris. Between the right eye and the dorsal fin there is a semiluniformal depression, where the body is so thin that it easily breaks to pieces or separates itself from the dorsal fin when incautiously manipulated. In that case, of course, a part of the opposite eye is seen through the hole, and, to a superficial examination, the extraordinary appearance is presented of a flounder having two eyes and a half.

BIBLIOGRAPHICAL NOTICE.

The Birds of South Africa. A Descriptive Catalogue of all the known Species occurring south of the 28th Parallel of South Latitude.
By EDGAR LEOPOLD LAYARD, F.Z.S. &c. Cape Town: 1867.
(London: Longmans.) 8vo, pp. 382.

“CONTRIBUTORS cannot be criticised:” this is the principle on which a good many publications are conducted; and in politics or in general literature it may answer well enough. Naturalists, however, are exempt from any such consideration. They may, nay they are bound to say what they think of the labours of their fellows. Hence, in speaking of Mr. Layard’s recent work, we dismiss from our thoughts the fact that he has been, and we hope will again be, one of the contributors to this Journal. The Ceylon ornithologist whose graphic pen enlivened our pages fifteen years ago, and more, must stand at our bar and listen to our summing-up without being able to call the court as a witness to his character. Indeed he has entirely changed his mode of life since then—of necessity, it need scarcely be said (for no man in his senses would do so willingly): he has abandoned the jungle and the forest for the museum and the library. In this new sphere he is certainly not yet so successful; but *non cuivis contingit*. A drouthy ‘Descriptive Catalogue’ affords but little scope for that kind of talent which distinguished his former writings. It must be judged by other rules.

First of all, in such a case, to make his descriptions complete and of the most service, the author should make them also comparative. This Mr. Layard has not done. His descriptions have been penned at various times and in various places, which was probably unavoidable; but, then, they should have been subsequently compared with one another, so as to ensure their symmetry. For species the author has not himself seen, of course he is quite right to quote the original descriptions unaltered; and this, the safest plan, Mr. Layard appears to have followed. But we are speaking of descriptions written by himself; and the "broken and disjointed style" for which he in a measure apologizes in his "preface" is here unnecessary: it not merely disfigures the book, but is an absolute hindrance to its utility.

The next important point is that the author of such a Catalogue as the present should be very precise in quoting from his predecessors. But here there is much room for improvement. Mr. Layard is weakest in his "bookwork." We have no bibliographical information afforded us, no list of authorities given, and the references to the publications cited are now put in one form and now in another, while many, and these most necessary, references are not made at all. This is especially to be regretted in a book on South-African birds; for respecting the ornithology of few parts of the world are the materials so widely scattered and so little digested. It would have been a great achievement for Mr. Layard to have drawn up his references on a well-arranged system. Very likely it would have been a troublesome job, but still one quite feasible and quite worth the labour bestowed upon it. Besides, we are much mistaken if it could have been done anywhere better than at Cape Town. Take for instance the numerous contributions to South-African ornithology by Sir Andrew Smith. In this country we doubt whether any library contains a complete series of them. Some of his descriptions originally appeared in newspapers published in the colony; and at the Cape, if anywhere, copies of these papers should be accessible. Now Mr. Layard evinces no sign of having made search for them, and yet, from all we have heard of the public library of Cape Town, they are to be found there.

We do not make these depreciatory observations without reason. The fact is that Mr. Layard's book, as far as it goes, is so good and so useful, that it ought to be better and more useful. He modestly says of it that "it is a move forwards, and may serve as a foundation for the labours of others whose opportunities may be greater." But we would impress upon Mr. Layard that he has the greatest opportunities of any one. We believe that he has informed his friends at home that he is already preparing a second edition. We are very glad to hear it; but we trust he will take care that the work undergoes a very thorough revision before a second edition is printed. Moreover we venture, in addition to the hints for its improvement given above, to recommend him to eliminate all those species, now included, which he himself shows have been erroneously introduced in the South-African fauna. By doing this he will leave

more room for the proper treatment of the rightful natives. To our readers we would give the advice that they should at once purchase the 'Birds of South Africa,' as, the sooner this edition is sold off, the sooner we may expect the new and improved one. To Mr. Layard we tender our best wishes for his health and zeal, that he may successfully prosecute his task.

MISCELLANEOUS.

Natica catenata (Philippi).

To the Editors of the *Annals and Magazine of Natural History*.

GENTLEMEN,—What is the true habitat of *Natica catenata*?

Reeve, in his monograph of the genus, gives "Sicily," but without quoting any authority.

Moreover Philippi, whose description Reeve copies, in his original account of the species (*Proc. Zool. Soc.* 1851, p. 233), in which he describes it from specimens in the collection of Mr. Cuming, assigns no locality; it may therefore be presumed that none was attached to the Cuming specimens.

Some shells in the collection of this Museum, belonging to this species, are labelled as from Mazatlan; but no authority is given for the habitat. I should therefore be glad to know if any examples of this species have been recently obtained, and, if so, from where.

I perceive Reeve changes *Natica Incei*, Philippi, into *N. Incei*, and *Natica caribæa*, Philippi, into *N. caribbæa*.

Do not these seem rather unnecessary alterations, and apparently founded on no good reason?

I have, &c.,

T. GRAHAM PONTON.

Institution, Bristol.

Balatro calvus, a New Genus and Species of Rotatoria entirely destitute of Vibratile Cilia. By E. CLAPARÈDE.

M. Mecznikow has lately described (*Siebold and Kölliker's 'Zeitschrift,'* 1866, p. 346), under the name of *Apsilus lentiformis*, a Rotatorian entirely destitute of vibratile cilia; and M. Claparède now communicates an account of an animal of the same kind observed by him some years ago in the Seime, a small river of the Canton of Geneva. It was found creeping on the bodies of *Trichodrili* and other small Oligochæta.

The body of this animal, to which M. Claparède gives the name of *Balatro calvus*, is more or less vermiform and very contractile. Its posterior extremity (foot) is divided into two lobes, of which the ventral is semilunar, with acute angles which are capable of invagination. The dorsal lobe forms a flattened cylinder terminated by three mammillæ. Between the two lobes the anus is situated.

The anterior extremity, which is indistinctly annulated, is capable of retraction as in other Rotatoria. The mastax is not largely developed and is armed with a very small incus and with two curved